

REMARKS

The following remarks are directed to the various grounds of rejection as listed in the Office Action of June 12, 2009.

Restriction/Election

Claims 1-4, and 8 are amended herein to delete those embodiments in which either R¹ or R³ is heteroaryl. Applicant expressly reserves the right to pursue this subject matter in one or more continuing or divisional applications.

35 U.S.C. 112, first and second paragraphs, as to “solvates”

The claims stand rejected as failing to comply with the enablement and written description requirements of 35 U.S.C. 112 with respect to the term “solvates.” Applicant respectfully points out that the specification discusses solvates at least at page 8, lines 11-17, so as to enable one skilled in the art to make the solvates of the present invention. Nevertheless, without acquiescing in this ground of rejection, and solely to expedite prosecution of the present application, the term “solvate” has been deleted from claims 1, 4, 6, and 9. It is respectfully submitted that these amendments are sufficient to overcome this ground of rejection.

35 U.S.C. 112, first and second paragraphs, as to “substituents”

The claims stand rejected as failing to comply with the enablement and written description requirements of 35 U.S.C. 112 with respect to the term “substituents.” It is respectfully pointed out that the specification is replete with definitions of the various substituents at page 7, lines 16-31; page 10, lines 6-12; and at page 18, lines 17-24. The specification also includes 168 intermediates and 241 examples, which are certainly ample to indicate to one skilled in the art the contemplated substituents and how to make compounds having them. Nevertheless, without acquiescing in this ground of rejection, and solely to expedite prosecution of the present application, claim 1 is amended herein to identify the possible substituents of R¹ and R³. This amendment finds support in the specification at page 7, lines 18-21. The optional substituents for the other R moieties are already identified in

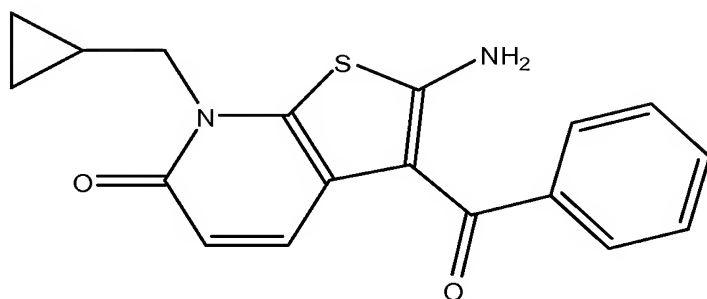
claim 1. It is respectfully submitted that this amendment, taken in conjunction with the entire disclosure, is sufficient to overcome this ground of rejection.

35 U.S.C. 112, second paragraph as to (C₃₋₇ cycloalkyl)methyl

The Examiner states that the term (C₃₋₇ cycloalkyl)methyl is indefinite because it is not clear whether methyl is a substituent on the cycloalkyl ring, the Examiner stating that “the term methyl is a terminal group and not a linking group.

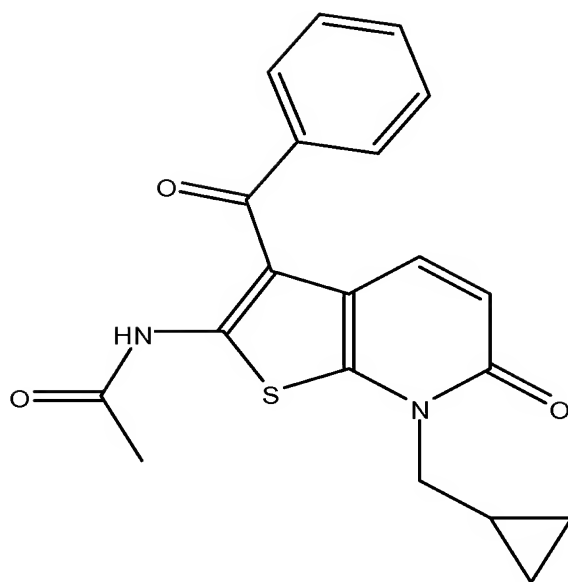
Applicants respectfully disagree that the term “methyl” as used in the claims herein would always be understood to be a terminal group and not a linking group. The Examiner’s attention is directed to the specification at Examples 39, 40, 86, 115-118, 147, 173, 174 and 220-223 each of which includes a cyclopropylmethyl group. The ultimate starting material for all these Examples is either cyclopropylmethyl bromide (cf. Intermediate 9) or (isothiocyanatomethyl)cyclopropane (cf. Intermediate 79) which the skilled person would immediately recognize as being (cyclopropyl)-CH₂-Br and (cyclopropyl)-CH₂-NCS respectively. When the names of the compounds of the Examples are entered into the commonly used software program “ChemDraw Ultra,” the resulting structures demonstrate that the methyl in “cyclopropylmethyl” as used in the present application is indeed a linking group, as one skilled in the art would expect from the intermediates from which they were made. Representative Examples are set forth below.

Example 40



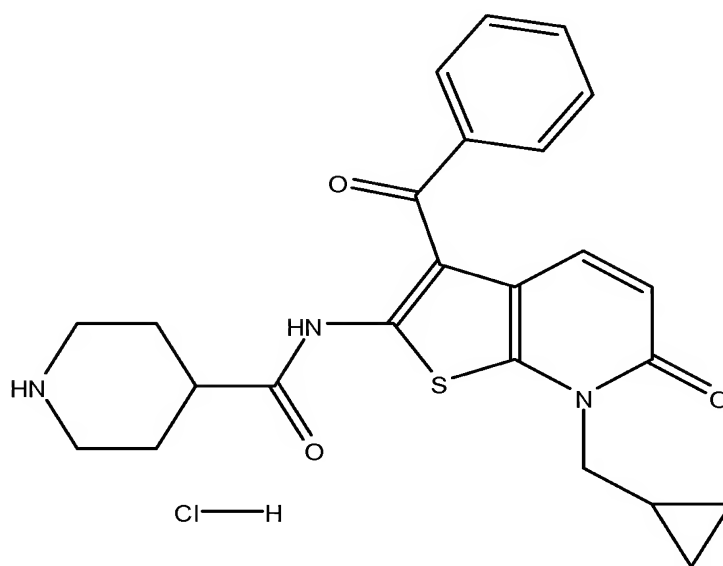
2-Amino-3-benzoyl-7-(cyclopropylmethyl)thieno[2,3-b]pyridin-6(7H)-one .

Example 86



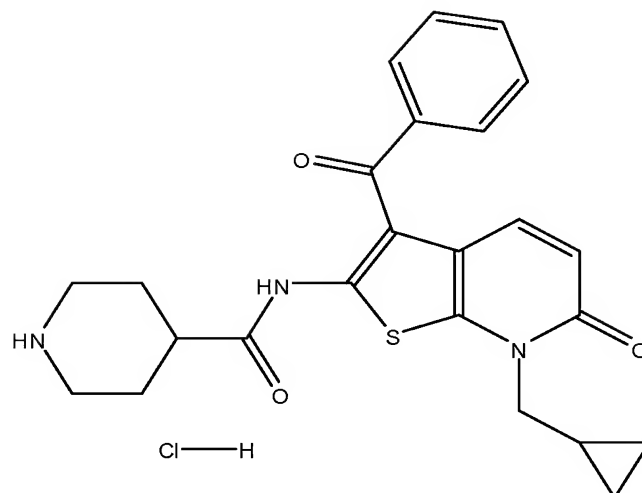
N-[3-Benzoyl-7-(cyclopropylmethyl)-6-oxo-6,7-dihydrothieno[2,3-b]pyridin-2-yl]acetamide

Example 147



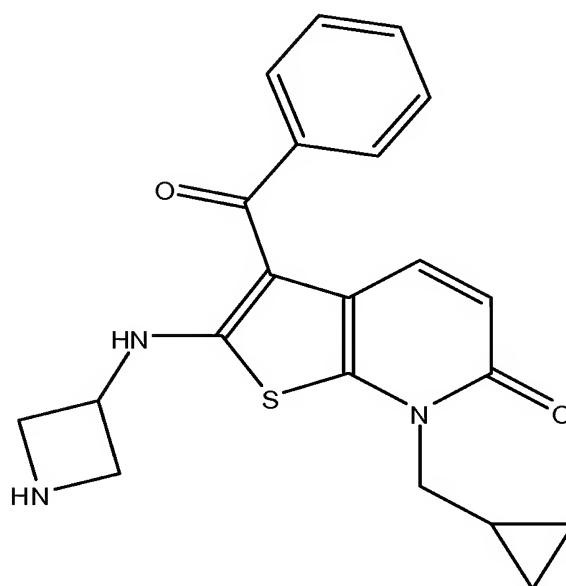
N-[3-Benzoyl-7-(cyclopropylmethyl)-6-oxo-6,7-dihydrothieno[2,3-b]pyridin-2-yl]piperidine-4-carboxamide hydrochloride

Example 173



N-[3-Benzoyl-7-(cyclopropylmethyl)-6-oxo-6,7-dihydrothieno[2,3-b]pyridin-2-yl]piperidine-4-carboxamide hydrochloride

Example 220



2-(Azetidin-3-ylamino)-3-benzoyl-7-(cyclopropylmethyl)thieno[2,3-b]pyridin-6(7H)-one

It is clear from the foregoing illustrative, non-limiting examples how those skilled in the art understand the term “(C₃₋₇ cycloalkyl)methyl” as used in the present application and the present claims, and it respectfully submitted that use of the term in the present claims is adequate to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

CONCLUSION

As all grounds of rejection have been overcome, it is respectfully requested that this application be passed to allowance. The Examiner is invited to contact the undersigned applicant's representative if it is believed that such communication would further the progress of the application.

Respectfully submitted,

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